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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,233	03/31/2004	Yen-Fu Chen	AUS920031048US1	8121

48916 7590 09/22/2008

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EXAMINER	
JACOB, MARY C	

ART UNIT	PAPER NUMBER
2123	

MAIL DATE	DELIVERY MODE
09/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/815,233	CHEN ET AL.	
	Examiner	Art Unit	
	MARY C. JACOB	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-18,20-25 and 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8, 10-18, 20-25, 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The response filed 7/13/08 has been received and considered. Claims 1-8, 10-18, 20-25 and 27 have been presented for examination.

Claim Objections

2. The objections to the claims recited in the 3/13/08 Office Action, not repeated below, have been withdrawn in view of the amendments to the claims filed 7/13/08.

3. Claim 14 is objected to because of the following informalities. Appropriate correction is required.

4. Claim 14, lines 4-5 recite, "whether or not modified, allocated subset of the available computing resources...", it would be better if written, "whether or not *the* modified...".

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-4, 7, 8, 10, 12-18, 20-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chandra et al ("An Online Optimization-based Technique for Dynamic Resource Allocation in GPS Servers", Technical Report UM-CS-2002-030, University of Massachusetts, July 2002) in view of D'Arienzo et al ("Automatic SLA Management in SLA-Aware Architecture", 10th International Conference on Telecommunications, 23 Feb-1 March 2003, Vol. 2, pages 1402-1406).

8. As to Claims 1, 2, 13, 14 and 21 Chandra et al teaches: a method for predicting service level in a utility computing environment having a dynamically allocated subset of computing resources from a set of available computing resources, the method comprising the steps of: creating a resource profile corresponding to a dynamically allocated subset of computing resources allocated according to a service level agreement (page 1, column 2, paragraph 2, lines 18-29; page 2, section A, lines 1-10; pages 2-3, "Problem Definition", paragraphs 1-3; page 7, "Simulation Setup and Workload Characteristics", paragraph 1, lines 1-2; page 9, column 1, lines 4-9); loading a workload profile representing a hypothetical demand profile for the enterprise (page 3, "Dynamic Resource Allocation", paragraph 1; page 5, "Workload Prediction Techniques", paragraph 2; page 7, "Simulation Setup and Workload Characteristics",

paragraph 2, lines 1-2); and simulating the processing of the workload profile, wherein the workload profile is based upon actual, measured data (page 5, "Workload Prediction Techniques", paragraph 2; page 7, "Simulation Setup and Workload Characteristics", paragraph 2, lines 1-5), using the resource profile to produce a service level result, wherein the resource profile resource subset is modified during the simulation according to the service level agreement and based upon the service level result (page 7, "Simulation Setup and Workload Characteristics", paragraph 1, lines 1-2, paragraph 2, lines 1-2; pages 8-9, sections C and C.1; page 10, section C.2, last paragraph). As to logic and memory, it is concluded that since Chandra teaches that the prediction and allocation techniques are simulated using various simulation packages (page 7, section A, paragraph 1), it is understood that memory and logic are present to store the simulation program, algorithms, and system parameters, and that logic is present within the simulation software to perform the simulation operations as disclosed in the limitations.

9. Chandra et al does not expressly teach: (claims 1, 13 and 21) generating a new service level agreement in the event the resource profile cannot process the workload profile at an expected service level corresponding to the service level agreement, wherein the new service level agreement will process the workload profile at an expected service level and (claims 2, 14 and 21) comparing the service level result to a (second) service level agreement and signaling whether the computing resource profile will process the workload profile at an expected service level corresponding to the (second) service level agreement.

10. D'Arienzo et al teaches an automatic mechanism for Service Level Agreement (SLA) management that can lead to cost reduction and enable the creation of short term services (Conclusions, lines 7-9) as an improvement to current interconnections among IP networks that are established by means of SLAs which require high manual overhead and a high associated cost and cause a non-optimized resource allocation of resources within the network (Abstract, lines 7-12). D'Arienzo et al teaches that a SLA is monitored and in the case of modified conditions with respect to either the quality of service offered for that particular service or the price agreed (the service level is compared to the service level agreement and it is determined whether the computing resources will process the workload profile at the expected service level), the SLA in question can either be re-negotiated or replaced by a brand new one (page 1405, column 2, paragraph 1, lines 7-11).

11. Chandra et al and D'Arienzo et al are analogous art since they are both directed to the management of network resources to meet quality of service requirements.

12. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of predicting service level in a utility computing environment having a dynamically allocated subset of computing resources from a set of available computing resources as taught in Chandra et al to further compare a service level result to a (second) service level agreement and to generate a new service level agreement if it is determined that the service level result does not process the workload profile at the expected level of service corresponding to the SLA as taught in D'Arienzo et al since D'Arienzo et al teaches an automatic mechanism for

Service Level Agreement (SLA) management that can lead to cost reduction and enable the creation of short term services (Conclusions, lines 7-9) as an improvement to current interconnections among IP networks that are established by means of SLAs which require high manual overhead and a high associated cost and cause a non-optimized resource allocation of resources within the network (Abstract, lines 7-12).

13. As to Claims 3, 15 and 22, Chandra et al in view of D'Arienzo et al teaches: wherein the subset of computing resources includes allocated processing resources and memory resources for a client account (Chandra et al: page 2, section A, lines 1-10, lines 17-21).

14. As to Claim 4, Chandra et al in view of D'Arienzo et al teaches: wherein the service level agreement includes a base resource allocation (Chandra et al: page 3, column 1, lines 1-5; page 4, column 1, "ii"), a maximum resource allocation (Chandra et al: page 4, column 1, "ii"), resource costs (Chandra et al: page 4, column 1, last 4 sentences-column 2, line 2) and rules for dynamically reallocating the resources based upon workload demand (Chandra et a: pages 3-4, "Allocating Resource Shares to Applications", paragraphs 1-2).

15. As to Claims 7, 17 and 24, Chandra et al in view of D'Arienzo et al teaches: wherein the set of computing resource profile also includes communication bandwidth allocation (Chandra et al: page 2, section A, lines 17-21).

16. As to Claims 8, 18 and 25, Chandra et al in view of D'Arienzo et al teaches: the step of comparing the workload profile to a second workload profile representing an actual demand profile for a second client account wherein the simulating step is based

upon a result of the comparison step (Chandra et al: page 9, section C.2, paragraphs 1 and 2; Figures 8 and 9).

17. As to Claims 10, 20 and 27, Chandra et al in view of D'Arienzo et al teaches: wherein the workload profile includes scheduling information and the simulation step incorporates the scheduling information in the processing (Chandra et al: pages 2-3, "Problem Definition", paragraph 3; pages 8-9, section C.1).

18. As to Claim 12, Chandra et al in view of D'Arienzo et al teaches: wherein the workload profile is loaded from a configuration file (Chandra et al: page 7, section A, paragraphs 1 and 2).

19. As to Claims 23 and 16, Chandra et al in view of D'Arienzo et al teach: wherein the computing resource profile further comprises: a base resource allocation (Chandra et al: page 3, column 1, lines 1-5; page 4, column 1, "ii"); a maximum resource allocation (Chandra et al: page 4, column 1, "ii"); resource costs (Chandra et al: page 4, column 1, last 4 sentences-column 2, line 2); and rules for dynamically reallocating the resources based upon workload demand (Chandra et al: pages 3-4, "Allocating Resource Shares to Applications", paragraphs 1-2).

20. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chandra et al in view of D'Arienzo et al as applied to claim 1 above, further in view of Chan (US Patent 6,466,898).

21. Chandra et al in view of D'Arienzo et al teaches simulating the processing of a workload profile using a resource profile to produce a service level result.

22. Chandra et al in view of D'Arienzo et al does not expressly teach wherein the simulation is scheduled to run automatically at an off-peak time.

23. Chan teaches an HDL simulator that provides simulation job scheduling on a local and/or remote platform that allows designers to balance the work loads on their network resources by scheduling simulation runs at off-peak hours as well as to automate the regular regression testing of their designs (column 4, lines 33-39; column 14, line 51-column 15, line 3).

24. Chandra et al in view of D'Arienzo et al and Chan et al are analogous art since they are both directed to the running of simulations.

25. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the simulating of the processing of a workload profile using a resource profile to produce a service level result as taught in Chandra et al in view of D'Arienzo et al to further include scheduling the simulation to run automatically at an off-peak time as taught in Chan since Chan teaches that job scheduling allows designers to balance workloads on their network resources by scheduling simulation runs at off-peak hours (column 4, lines 33-39; column 14, line 51-column 15, line 3).

26. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chandra et al in view of D'Arienzo et al as applied to claim 1 above, further in view of Sheets et al (US Patent 6,816,905).

27. Chandra et al in view of D'Arienzo et al teaches a resource profile corresponding to a first subset of computing resources allocated according to a service level

agreement, loading a workload profile representing a demand profile for an enterprise and simulating the processing of a workload profile using a resource profile to produce a service level result.

28. Chandra et al in view of D'Arienzo et al does not expressly teach the step of determining a cost associated with meeting the service level agreement.

29. Sheets et al teaches a method and system for operating a hosted service provider for the internet that is capable of dynamically reallocating servers across multiple disparate customer accounts to provide hosted services with a more economical and flexible server farm management (column 6, lines 19-23; column 7, lines 9-13) wherein the cost associated with meeting a service level agreement is determined (column 18, lines 60-67).

30. Chandra et al in view of D'Arienzo et al and Sheets et al are analogous art since they are both directed to dynamic reallocation of resources in a shared data center.

31. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the simulating of a workload profile using a resource profile to produce a simulation result as taught by Chandra et al in view of D'Arienzo et al to further include determining the cost associated with meeting a service level agreement as taught by Sheets et al since Sheets et al teaches a method and system for operating a hosted service provider for the internet that is capable of dynamically reallocating servers across multiple disparate customer accounts to provide hosted services with a more economical and flexible server farm management (column 6, lines 19-23; column 7, lines 9-13).

32. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chandra et al in view of D'Arienzo et al as applied to claim 1 above, and further in view of Nargarajan et al ("Modelling and Simulation of an Alarm Based Network Management System for Effective SLA Monitoring and Management", SCI 2003. 7th World Multiconference on Systemics, Cybernetics and Informatics Proceedings, July 27-30, 2003).

33. Chandra et al in view of D'Arienzo et al teach a method for predicting service level in a utility computing environment wherein the method includes leading a workload profile representing a demand profile for an enterprise and simulating processing of the workload profile using a resource profile corresponding to a subset of computing resources allocated according to a service level agreement.

34. Chandra et al in view of D'Arienzo et al does not expressly disclose: (claim 11) wherein the workload profile includes information corresponding to one or both of prioritization of resources and importance of specific resources.

35. Nagarajan et al teaches simulation as an important process in documenting service level agreements (SLA) since simulation studies allow an Internet Service Provider (ISP) to verify their SLA agreements and check if it meets customer expectations and whether the specified service could be provided (section 1, paragraph 2, lines 4-6), wherein the simulation techniques include comparing the service level result to a service level agreement and signaling whether the computing resource profile will process the workload profile at an expected service level corresponding to the

service level agreement (section 3, last paragraph, lines 10-12; page 5, column 2, lines 3-9; section 6.2, paragraph 1, lines 1-1-9) and wherein the workload profiles simulated include information corresponding to one or both of prioritization of resources and importance of specific resources (page 2, "The type of scenarios examined in this SLA simulation study", items 2 and 3; page 4, column 1, lines 2-7).

36. Chandra et al in view of D'Arienzo et al and Nagarajan et al are analogous art since they are both directed to the testing of an ISP's allocation of resources and whether they satisfy workload demand and the expected service level corresponding to a service level agreement.

37. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the simulating of processing a workload profile using a resource profile to produce a service level result as taught in Chandra et al in view of D'Arienzo et al to further include wherein the simulated workload profile includes information corresponding to one or both of prioritization of resources and importance of specific resources as taught in Nagarajan et al since Nagarajan et al teaches simulation as an important process in documenting service level agreements (SLA) since simulation studies allow an Internet Service Provider (ISP) to verify their SLA agreements and check if it meets customer expectations and whether the specified service could be provided (section 1, paragraph 2, lines 4-6).

Response to Arguments

38. Applicant's arguments filed 7/13/08 have been fully considered but they are not persuasive.

39. Applicant argues that Chandra is directed to the monitoring and management of actual resources in a computing environment, not to the monitoring and management of a service level agreement (page 11). The Examiner would like to note that the claims are directed to (claim 1) "a method of *predicting service level*", (claim 13) "a system for *simulating service* in a utility computing environment having a first service level agreement" and (claim 21), "a computer program product for *predicting service level* compliance in a utility computing environment having a service level agreement" wherein a simulation of the processing of a workload profile using a dynamically allocated resource profile is run to produce a service level result, and *wherein a new service level agreement is generated if the resource profile cannot process the workload profile at an expected service level corresponding to the service level agreement*. It is unclear to the Examiner how a service level agreement is "managed", if a new one is "generated" as set forth in the claims. For example, the claims do not set forth that the existing service level agreement, or the components that make up the service level agreement, are modified so that the agreement is maintained, which would suggest that the existing service level agreement is "managed". Further, Chandra is directed to *simulations* performed to evaluate dynamic resource allocation techniques that are necessary in the presence of dynamically varying workloads *to provide guarantees (QoS requirements) to web application* running on shared data centers (see Abstract

and Conclusion, paragraph 1 and page 10, section C.2, last paragraph). These simulations taught by Chandra, as set forth in the citations by the Examiner, predict service level by simulating the processing of a workload profile using a dynamically allocated resource profile thereby producing a service level result as set forth in the claim limitations. The Examiner sets forth that Chandra does not explicitly teach "generating a new service level agreement", but that these limitations are taught or suggested by the combination of Chandra and D'Arienzo et al as set forth above.

40. Applicant argues that Chandra does not even mention SLA's and is therefor an inappropriate basis for a rejection of Applicants' claims (page 12). The Examiner respectfully disagrees. As set forth above, Chandra is directed to simulations performed to evaluate dynamic resource allocation techniques that are necessary in the presence of dynamically varying workloads to provide "guarantees" to web applications, that is, meet a specified quality of service, running on shared data centers (see Abstract; Conclusion, paragraph 1; page 2, section B, paragraph 1, lines 2-4; page 8, section C.1, lines 5-8; page 10, section C.2, last paragraph). It is understood that the "QoS requirements" and "guarantees on resource availability and performance" that is provided in return for the payment for server resources by the application owner as taught by Chandra (see page 1, section A, paragraph 1, lines 6-13 and paragraph 2, lines 5-8) is a service level agreement (also, for further description of a service level agreement as known in the prior art, see cited, US Patent 6, 701,342, column 5, lines 10-14 that recites that the quality of service level is defined by terms set forth in a service level agreement). Further, the dynamic allocation techniques as set forth in

Chandra are used to dynamically modify resources such that a specified QoS is met (page 1, column 2, lines 18-29), thereby managing a SLA agreement though this dynamic allocation of resources to ensure that the guarantees are met. Therefore, it is the Examiner's position that Chandra is an appropriate basis for a rejection of Applicants' claims.

41. Applicant argues that there is no expectation that Chandra would be combined with D'Arienzo by one of ordinary skill in the corresponding arts because D'Arienzo is directed to an entirely different technology than Chandra. As recited in the Office Action, Chandra and D'Arienzo et al are analogous art since they are both directed to the management of network resources to meet quality of service requirements (see Chandra: Abstract, specifically, "dynamic resource allocation techniques are necessary…to provide guarantees to web applications…We present online workload prediction and optimization-based techniques to dynamically allocate resources to competing web applications"; D'Arienzo page 1403, column 2, paragraph 2, lines 3-7, "In the case the customer agrees with the terms of the contract...the RM will be in charge of operating the device configuration...", page 1403, column 2, paragraph 4, lines 7-11, "...prepare the SLA and subsequently map the SLA...to be instantiated in cooperation with the Resource Mediator", page 1403, column 2, paragraph 5, lines 8-11, "…update the service level management system with new rules and configuration as required in conjunction with the Resource Mediators). It is the Examiner's position that the conclusion that the arts are analogous is proper.

42. Applicant argues that the Office Action is combining two unrelated references, at least one of which is unrelated to Applicant's claim terminology, i.e., the monitoring and management of an SLA. As discussed above, it is the Examiner's position that the arts are analogous. Further, it is the Examiner's position that the references are related to Applicant's claim terminology, that is, a method for *predicting service level* in a utility computing environment having a dynamically allocated subset of computing resources and generating a new service level agreement. As discussed above with respect to the "management of an SLA", it is unclear to the Examiner how a service level agreement is "managed", if a new one is "generated" as set forth in the claims. For example, the claims do not set forth that the existing service level agreement, or the components that make up the service level agreement, are modified so that the agreement is maintained, which would suggest that the existing service level agreement is "managed".

43. Applicant argues that page 1, column 2, lines 18-19 of Chandra, one citation set forth by the Examiner for the claimed "resource profile" is mischaracterized and seems to be directed more to a workload profile or demand profile and that the Office Action seems to rely upon this excerpt for a "resource profile", "workload profile" and "demand profile" (page 12). This cited section of Chandra, relied upon to show the resource profile in the Office Action, teaches the dynamic allocation of resources (creation of a resource profile), that is, how and what resources are allocated, based on the needs (workload) of an application. The Examiner does not understand Applicant's argument that this citation is more directed to a workload profile or demand profile. Further, the

Examiner did not rely upon this citation of Chandra for "workload profile" or "demand profile" (see citations above).

44. Applicant argues that a prima facie case of obviousness has not been established since all claim limitations are not taught or suggested by the prior art. It is the Examiner's position that all claim limitations are taught or suggested by the prior art as cited. Further, the Examiner set forth that the arts are analogous, that is since Chandra and D'Arienzo et al are both directed to the management of network resources to meet quality of service requirements. Finally, a motivation to combine the references, Chandra and D'Arienzo et al, is set forth, wherein D'Arienzo et al teaches an automatic mechanism for Service Level Agreement (SLA) management that can lead to cost reduction and enable the creation of short term services as an improvement to current interconnections among IP networks that are established by means of SLAs which require high manual overhead and a high associated cost and cause a non-optimized resource allocation of resources within the network. Therefore, it is the Examiner's position that a prima facie case of obviousness has been established and is proper.

Conclusion

45. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

46. Levy et al ("Performance Management for Cluster Based Web Services", IFIP/IEEE Eighth International Symposium on Integrated Network Management, 24-28

March, 2003, pages 247-261) teaches a performance management system that dynamically allocates resources to support a service level agreement.

47. Pazel et al ("Neptune: A Dynamic Resource Allocation and Planning System for a Cluster Computing Utility", 2nd IEEE/ACM International Symposium on Cluster Computing and the Grid, p. 57, 2002) teaches a policy driven fabric management system that dynamically reconfigures resources in a computing utility cluster.

48. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

49. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary C. Jacob whose telephone number is 571-272-6249. The examiner can normally be reached Tuesday-Thursday, 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Mary C Jacob/
Examiner, Art Unit 2123

/M. C. J./
9/17/08

/Paul L Rodriguez/

Supervisory Patent Examiner, Art Unit 2123